

Downward spiral: The impact of out-of-home placement on paternal welfare dependency☆

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ABSTRACT

In this article, we test how out-of-home placement affects men's labor market attachment, and in so doing we provide a novel parallel to existing research on how fatherhood affects men, which focuses almost exclusively on a child's arrival. Using population panel data from Denmark that include all first time fathers whose children were placed in out-of-home care from 1995 to 2005, we find that having a child placed in care is associated with up to a 4 percentage point increase in welfare dependency. Having a child placed in out-of-home care appear to aggravate conditions that likely necessitated the out-of-home placement to begin with, thereby likely necessitating longer duration of out-of-home placements. Thus, out-of-home placements have substantial secondary costs for parents and society.

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A large and growing literature has established that lack of socio-economic resources directly affects children's risk of experiencing maltreatment and out-of-home placements (Berger, Paxson, and Waldfogel, 2009; Bitler, Gelbach, & Hoynes, 2006; Cancian, Yang and Slack, 2013; Gilbert et al., 2009; Paxson & Waldfogel, 2003a, 2003b; Waldfogel, 2004; Wildeman and Fallesen, forthcoming), and that further decreasing such resources during an out-of-home placement prolongs the time children spend in care (Cancian et al., forthcoming). However, having a child placed into out-of-home care could also in itself aggravate the existing conditions in the family that created the need for an out-of-home placement in the first place. The aggravation would occur, if an out-of-home placement nullifies some of the positive influences research has shown children to have on especially their father's productive and pro-social behavior.

Becoming a father is a turning point that reshapes men's identities and behaviors (Edin & Nelson, 2013; Edin, Nelson, & Paranal, 2004; Sampson & Laub, 1995). The impact on men's earnings and hours in paid labor has received special attention (e.g. Glauber, 2008; Killewald, 2013; Knoester & Eggebeen, 2006; Lundberg & Rose, 2002; Percheski & Wildeman, 2008) as a corollary to the motherhood wage

penalty (e.g. Budig & England, 2001; Correll, Benard, & Paik, 2007; Gangl & Ziee, 2009). Children affect men's labor market behavior because fatherhood imposes time constraints and alters social identity, thereby positively influencing productive time use and other forms of pro-social behavior (Akerlof, 1998; Kaufman & Uhlenberg, 2000; Waite, Haggstrom, & Kanouse, 1985; Warr, 1998). Yet, besides considering the arrival of children, research has paid little attention to how children's presence in men's lives (or lack thereof) affects productive behavior.

In this article, we study a new dimension of the role children play in men's lives, by examining how a child's departure by way of an out-of-home placement affects fathers' labor market behavior. Recent qualitative research indicates that parents experience loss of social identity when their children are taken into out-of-home placement (Ainsworth & Hansen, 2011; Buchbinder & Bareqet-Moshe, 2011; Schofield et al., 2011). If such negative psychological outcomes spill over into, for example, fathers' labor market performance, it might worsen what could already be a fragile social position.

Although it is unlikely that the average father will experience having his child placed out-of-home, it is still a not an uncommon phenomenon in Western countries. In countries such as Denmark, the UK, and the United States, between three to 6% of a birth cohort can expect to enter out-of-home placement during their childhood (Fallesen, Emanuel, & Wildeman, 2014; Ubbesen, Gilbert, & Thoburn, 2015; Wildeman & Emanuel, 2014). Out-of-home placement occurs predominantly but not exclusively to children of men with low socioeconomic status (e.g. Andersen & Fallesen, 2010; Berger & Waldfogel, 2004; Ejrnæs, Ejrnæs, & Frederiksen, 2011). Children's departures may be a

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turning point that changes the children's fathers to ex-fathers. Such shocks to identity and time constraints could each separately impact fathers' labor market behavior. To conceptualize how out-of-home placements affect fathers, we combine theories on fatherhood with the role-theoretical process of becoming an ex (Ebaugh, 1988).

Understanding how fathers who are likely to have children placed outside home react has direct policy relevance. If men increase public dependency when their children enter care, it means we underestimate the costs of child welfare measures and that later reunification becomes more difficult as well (Cancian et al., forthcoming). To obtain a control group of fathers whose children are likely to enter out-of-home placement but do not, we use brothers of fathers whose children enter out-of-home placement—the children of the brothers in the control sample do not enter out-of-home placements. We include controls for family level fixed effects, ever having a child placed in out-of-home care, and birth order to account for confounding. Additionally, we allow the effect of out-of-home placement to vary across level of education and relationship status to study differential impact across likely protective factors.

1. Out-of-home placement, ex-fatherhood, and labor market behavior

In Denmark, recent research estimates the cumulative risk of a child ever to enter out-of-home care to fall between 0.03 and 0.06 (Fallesen et al., 2014; Ubbesen et al., 2015). American and English studies report findings in the similar range (Department of Health, 2000; Ubbesen et al., 2015; Wildeman & Emanuel, 2014). Out-of-home placements of children predominantly—but not exclusively—happen to men from disadvantaged social backgrounds (e.g., Berger & Waldfogel, 2004), a group also heavily targeted by policies aimed at enhancing labor market participation.

The experience of having a child placed in out-of-home care causes feelings of grief and loss of rights and identity (Ainsworth & Hansen, 2011; Buchbinder & Bareket-Moshe, 2011; Schofield et al., 2011). If the negative psychological outcome spills over into other parts of men's lives, having your child placed in out-of-home care might create additional barriers for men who already struggle to find and retain a job. Moreover, if out-of-home placement diminishes labor market attachment most among the most disadvantaged fathers, then out-of-home placements might exacerbate already existing inequalities both between placement and non-placement fathers and within the group of placement fathers.

Social scientists have given little to no consideration of how children's departures from fathers' lives affect these men's behavior (see however the above-mentioned), and no one has studied it using large-scale data (see however Lyngstad, 2013). Because of the lack of theoretical considerations and empirical studies, it is necessary to look elsewhere in order to understand why out-of-home placement should affect fathers' labor market attachment.

1.1. Leaving fatherhood

Fathers do of course not simply regress back to non-fatherhood when their children enter an out-of-home placement. Yet, as recent research shows, they appear to experience a loss of identity when their children enter care—something does change. Fatherhood is both a turning point in men's lives as well as a social role that men transition to (Edin & Nelson, 2013; Edin et al., 2004; Sampson & Laub, 1995). Having a child placed in out-of-home care marks a transition out of the functioning father-role—men are no longer charged with taking care of their child. In certain ways, they become ex-fathers (at least for a while). In her 1988 study of the ex-status, Ebaugh noticed that: “Exs tend to retain role residual or some kind of ‘hangover identity’ from a previous role as they move into new social roles” (1988, p. 5). Remnants of the father role persists for a while in ex-fatherhood, but the child is not around anymore, so the constraints imposed by both the child's physical presence and the social role of fatherhood erode.

1.2. Ex-fatherhood and labor supply

Men on average increase their labor supply when they become fathers (Knoester & Eggebeen, 2006; Percheski & Wildeman, 2008; Weinshenker, 2015). Fathers' increase in earnings (fatherhood wage premium) is also well established in the literature (e.g., Glauber, 2008; Hersch & Stratton, 2000; Hodges & Budig, 2010; Lundberg & Rose, 2002; see however Kunze, 2014). Whether we should expect them to decrease it when entering ex-fatherhood depends on the mechanism that governs fathers' labor market behavior. Previous research has used identity theory to argue that the role of father prompts men to increase productive behavior, working through biological ties, co-residence with the child, and marriage to the child's birthmother (e.g., Killewald, 2013). Ex-fatherhood is then the ‘hangover identity’ of fatherhood without the enforcement of pro-social behavior inherent in the father-role. An out-of-home placement could both erode the fatherhood identity and remove the incentive to work that was until then driven by the financial responsibility of caring for a child.

1.3. Protective factors

An out-of-home placement is an event that changes fatherhood to ex-fatherhood, thereby also changing social behavior through role-disintegration and the weakening of social bonds. Yet, the effect may vary across social and institutional contexts. Previous research emphasizes the importance of co-residence between children and their fathers for children to fully affect their fathers (Killewald, 2013). Single fathers, who tend not to live with their children even when the child is not in an out-of-home placement (Olsen, Larsen, & Lange, 2005), could react differently than fathers living with the biological mother. In addition, differences in occupational opportunities between fathers could mediate the impact of out-of-home placement on labor market attachment, because low educated fathers are more likely to work in more directly supervised jobs, and thus will have a harder time hiding a drop in productivity caused by an out-of-home placement of their child(ren).

1.3.1. Lack of everyday pre-placement contact as a protective factor

For an out-of-home placement to affect a father, the child has to be a part of his life prior to the placement. The fatherhood literature has established that regular contact with their children is a prerequisite for men to change their behavior and be involved as fathers (e.g., Bellamy, Thullen, & Hans, 2015; Killewald, 2013; Knoester, Petts, & Eggebeen, 2007). Men who do not live with their children are less involved in their children's lives (Tach, Mincy, & Edin, 2010), although not necessarily uninvolved (Danziger & Radin, 1990).

Men who have regular contact with their children through cohabitation experience a larger reinforcement of the father-role than men who do not live with the child, leading co-residing men to act more like fathers (Killewald, 2013). If (a) children enforce co-residing men's father-identity stronger than they do for non-co-residing men; and (b) an out-of-home placements truly lead to loss of identity (or at least the acquiring of an ex-identity), then lack of everyday contact with their children may protect men for part of the impact of an out-of-home placement on their identity, and thereby also on their labor market behavior. It of course important to remember that it is not random which fathers live with their children and which do not, and that the reasons for an out-of-home placement may correlate with the living situation.

1.3.2. Differences in reasons for and responses to out-of-home placements

Fathers with lower levels of education often work in hourly paid positions with lower wages (e.g., Goldthorpe, 2000). Lower wages goes hand in hand with higher degree of supervision, direct monitoring of work effort, as well as lower levels of job autonomy (e.g., Allgulien & Ellingsen, 2002; Kruse, 1992; Sessions & Theodoropoulos, 2008). So low-educated, low-wage fathers likely hold labor market positions that make it harder for them to hide a temporary personal crisis from employers.

Contrastingly, higher educated fathers more likely hold permanent positions with more job-autonomy and less day-to-day supervision, where a personal crisis will have a higher chance of going unnoticed and not affect the father's labor market attachment.

In addition, causes of out-of-home placements may differ across socioeconomic positions leading to differences in paternal response to a placement. Benefit cuts for parents with low socioeconomic status increase the risk of their children entering out-of-home care (Cancian, Yang, & Slack, 2013; Wildeman and Fallesen, forthcoming). Contrastingly, other recent work has demonstrated that children's own behavioral problems are an independent, contributing cause for increased family instability (Kvist, Nielsen, & Simonsen, 2013; Schermerhorn et al., 2012), lower parental labor supply (Kvist et al., 2013), and out-of-home placement risk (Fallesen & Wildeman, 2015). Thus, an out-of-home placement may have less adverse effects for fathers if the primary reason for the placement is child-specific problem behavior and not lack of resources, maltreatment, or neglect. All else equal, higher educated fathers are less likely to lack resources, so we should expect child problem behavior to cause a larger share of placements among this group, perhaps causing high educated fathers to even increase their labor supply if their children enter care.

2. Method

2.1. Data

This study uses Danish administrative register data. Statistics Denmark records all out-of-home placements and welfare payments in Denmark, as well as demographic and socioeconomic information on education, relationship status, age, etc. Researchers can access an anonymized version of the data where individuals can be tracked over time using a unique personal identifier, and also linked to both children and cohabiting partners. In this article, we use two distinct groups. First, we focus on firstborn children who had contact with social services during upbringing and whose fathers were at least 15 years of age between January 1, 1995 and December 31, 2005. Fathers remain in the sample until they either die or migrate, the child becomes a legal adult, or the father reaches retirement age at 67. To have a proper control group, we discard fathers without brothers with children that do not experience child placement, and then sample the brothers as the control group. We exclude any time period where a father is incarcerated from the data. Because we use administrative, complete registers on the entire population, we do not face problems of missing data or sample attrition. Death and emigration are the only sources of attrition (2.9% of fathers in the sample either die or migrate during the sampling period). The sample includes 21,702 fathers observed for 2,069,918 months. 9705 of the fathers have their child placed in out-of-home care at some point.

2.2. Measures

All variables are obtained from Statistics Denmark's population registers that contain the entire population. We obtain monthly data on fathers' welfare dependency, their age, their firstborn child's age, and out-of-home placement measures for their firstborn child. We also obtain information on where the father. Lastly, we obtain annual information on the fathers' education, grouping it according to the ISCED classification.

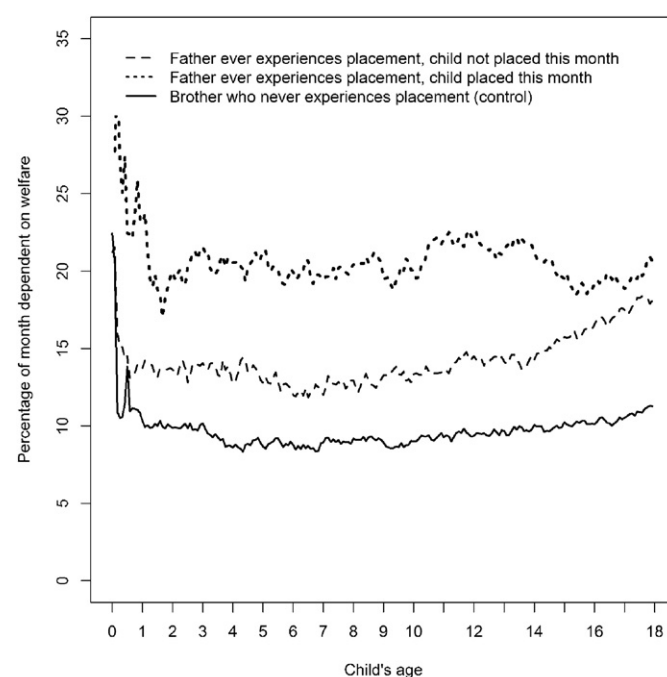
We know where all individuals in Denmark live (and with who), because Danes are required by law to give notice within five days of changing address. They receive all official communications from government agencies at the address that is on file, which give especially people with children an incentive to comply (Statistics Denmark estimates that address information is highly accurate [Statistics Denmark, 2016]). This allows us to generate precise indications of the fathers' living situations. We divide the indicator into three categories: living together with the biological mother of his child, living with another woman (not a blood relative), or living on his own (single). Because men whose children enter

out-of-home care generally hold more precarious positions in society, we choose not to distinguish between whether the father is married or simply cohabiting—the central distinction is whether he shares his dwelling with the mother of his child, another woman, or is living without a romantic partner. >89% of Danish children lived in 2004 with their mother if the children's parents were not living together, and the share was constant across the fathers' relationship status (Olsen et al., 2005). Thus, we feel certain that single men and men cohabiting with another woman than the mother of their child were very unlikely to live with their children prior to an out-of-home placement.

We measure welfare dependency as the percentage of a month a father receives any form of welfare benefit – that is, any form of public payment that does not imply an active position on the labor market. We obtain the data from the *Danish Rational Agent Economic Model* (DREAM) database that covers all public benefit transfers for all individuals receiving benefits in Denmark. Following our definition of welfare dependency, unemployment benefits are not a welfare benefit, because individuals have to be actively job seeking or participating in active labor market programs in order to qualify for unemployment benefits. Thus, our outcome variable effectively measures exit from the labor force.

Fig. 1 shows the differences in welfare dependency across the child's age for the sibling sample. Fathers whose children are placed in out-of-home care have, compared to their siblings, substantially higher welfare dependency—both while an out-of-home placement is ongoing and when it is not, consistent with the expectation that this group of fathers is worse off. Nevertheless, fathers experiencing their child going into an out-of-home placement appear to have very similar welfare trajectories as their brothers, with the main difference instead being their different levels of welfare take-up.

Table 1 shows sample statistics for both the full sample and the sibling sample. Fathers with children placed in out-of-home care have lower educational attainment, become fathers earlier, are less likely to live with the biological mother, and more likely to be single, further bolstering the finding that these fathers are worse off than their siblings.



Source: Own calculation on data from Statistics Denmark.

Fig. 1. Mean welfare dependency for fathers across child's age for sample of fathers ever experiencing placement and their brothers.

2.2.1. Timing of placement, welfare dependency, and unemployment

Fig. 1 shows that fathers' welfare dependency increases when their children are in out-of-home placement. Fathers who are employed have two possible responses to having their child placed in out-of-home care (besides remaining employed)—they can (a) become unemployed and job seeking or (b) become dependent on welfare benefits. Even if having a child placed in out-of-home care ultimately increases the father's welfare dependency, the road from employment to welfare dependency may still include some time spent as unemployed. Fig. 2 reports changes in fathers' unemployment degree and welfare dependency when an out-of-home placement occurs. For completeness, the figure report results from all Danish fathers whose children enter foster care in the study period. The figure looks similar when only considering men included in the analytical sample. The left panel shows the difference between the month before the out-of-home placement occurs and the month when the out-of-home placement occurs. The right panel shows the differences in mean welfare dependency and unemployment degree between before and during the out-of-home placement. Both panels show the changes across the minimum number of months the child spent in out-of-home care during a single out-of-home placement spell.

Table 1
Summary statistics for sibling sample.

	Full	Sibling	Placement
	Mean	Mean	Mean
	(Std. dev.)	(Std. dev.)	(Std. dev.)
Welfare dependency	12.719 (31.497)	9.593 (27.522)	16.349 (35.214)
Out-of-home placement (OHP)	0.163 (0.369)		0.352 (0.478)
OHP * cohabiting with other woman	0.076 (0.265)		0.165 (0.371)
OHP * cohabiting with child's mother	0.039 (0.193)		0.083 (0.276)
OHP * single	0.048 (0.214)		0.104 (0.305)
Single	0.186 (0.389)	0.120 (0.325)	0.262 (0.440)
Cohabiting with other woman	0.310 (0.464)	0.205 (0.404)	0.432 (0.495)
Cohabiting with child's mother	0.504 (0.500)	0.675 (0.469)	0.306 (0.461)
Age	36.287 (5.449)	36.337 (5.377)	36.228 (5.760)
Child's age ^a	9.975 (4.782)	9.228 (4.896)	10.843 (4.492)
Education			
Some primary	0.035 (0.184)	0.027 (0.162)	0.043 (0.203)
Primary	0.480 (0.500)	0.426 (0.494)	0.544 (0.498)
Vocational	0.363 (0.481)	0.396 (0.489)	0.325 (0.468)
High school	0.024 (0.154)	0.027 (0.162)	0.020 (0.141)
Short tert.	0.041 (0.198)	0.049 (0.217)	0.032 (0.175)
College	0.037 (0.189)	0.049 (0.217)	0.024 (0.153)
Master's/PhD	0.020 (0.139)	0.026 (0.160)	0.012 (0.109)
Observations	2,069,918	112,148	957,770
Fathers	21,702	11,997	9705

Notes: All differences between control and placement, as well as between siblings, are statistically significant because of the large sample size. Therefore, we do not provide *t*-tests in Table 1.

Source: Own calculation on data from Statistics Denmark.

^a Placed children are on average older, because some children in the "Sibling" sample will be placed later on at a time outside the time scope of the data. This lowers the mean age for the "Sibling" sample and increases the mean age for the "Placement sample".

The left panel of Fig. 2 shows that fathers whose children spent 11 months or more in out-of-home care during a single spell increased unemployment (and to a lesser extent decreased welfare dependency) the month their child entered out-of-home care. Unemployment degree is measured as percentage of a month a father receives unemployment benefits. When we also include fathers whose children spent < 11 months in care, we see a very small average increase for the entire sample in unemployment degree and welfare dependency at the month of placement. However, the right panel that shows that the mean difference in welfare dependency and unemployment degree before and during out-of-home placement demonstrates that fathers have substantially higher welfare dependency and lower unemployment degree when their child is in out-of-home care compared to prior to the out-of-home placement. Hence, some fathers' initial response to an out-of-home placement might be unemployment (for instance, e.g., if they are fired because they fail to show up to work), but the fathers end up receiving welfare benefits instead of unemployment benefits over time, which effectively means that they leave the labor market.

To make sure that it is out-of-home placement that affects labor market attachment and not the other way around, we redo the left panel of Fig. 2 for the twelve months leading up to the out-of-home placement. Figs. A.1, A.2, and A.3 in Appendix A display the results. There is no indication of an increase in neither welfare dependency nor unemployment degree the twelve months leading up to the out-of-home placement. Thus, out-of-home placement seems to affect paternal labor market attachment.

2.3. Analytical framework

It is not random whose child enters out-of-home care, but as researchers, we do not necessarily observe all relevant characteristics that affect the decision. To address the potential bias introduced by confounding factors, we use a control group highly similar to fathers whose children enter foster care: those fathers' brother, when the brothers themselves have children. The sibling sample allows us to estimate the impact of out-of-home placements on fathers likely to experience it. Siblings share family background and can therefore be expected to respond to events in similar fashion (e.g. Aaronson, 1998, Kunze, 2014). We estimate the following model:

$$WD_{it} = \mathbf{X}_{it}\beta + \sum_{fa} I_{fa}(f_{a_{it}})\gamma_{fa} + \sum_{ca} I_{ca}(ca_{it})\gamma_{ca} + \gamma_{year}year_t + \sum_m I_m\gamma_m + \delta Placement_{it} + \psi Placement_i + \alpha_i + \epsilon_{it} \quad (1)$$

where WD_{it} is welfare dependency expressed as share of month for individual i at child age t , \mathbf{X}_{it} is a matrix of socioeconomic covariates, $I_{fa}(f_{a_{it}})$ is a set of age-dummies for father, $I_{ca}(ca_{it})$ is the biographical time-dimension expressed as a set of age dummies for the child, $year_t$ is historical year as a linear term, I_m is month dummies, $Placement_{it}$ is an indicator equal to one if the child is placed in out-of-home care that month, $Placement_i$ is a time-constant indicator of whether the father have his child placed in out-of-home care while in the sample, α_i is the unobserved constant term, and ϵ_{it} is the idiosyncratic error term.

The underlying assumption is that once we control for family fixed effects, whether a father ever had his child placed, and time-varying characteristics, it is random whose children enter out-of-home care. Likely, that assumption is unrealistic for the general sample, but it appears more realistic that brothers are more alike. Brothers have equal risk derived from family background, but one of them experiences child placement and the other does not. By also removing that characteristic (controlling for $Placement_i$), we can then estimate how placing a child in out-of-home care affects the labor market attachment of men at risk of experiencing child out-of-home placement. That is, the sibling sample provides a policy relevant estimate.

Because the sibling sample relies on a family fixed effect, we cannot simply divide the sample into relationship subsamples to examine how

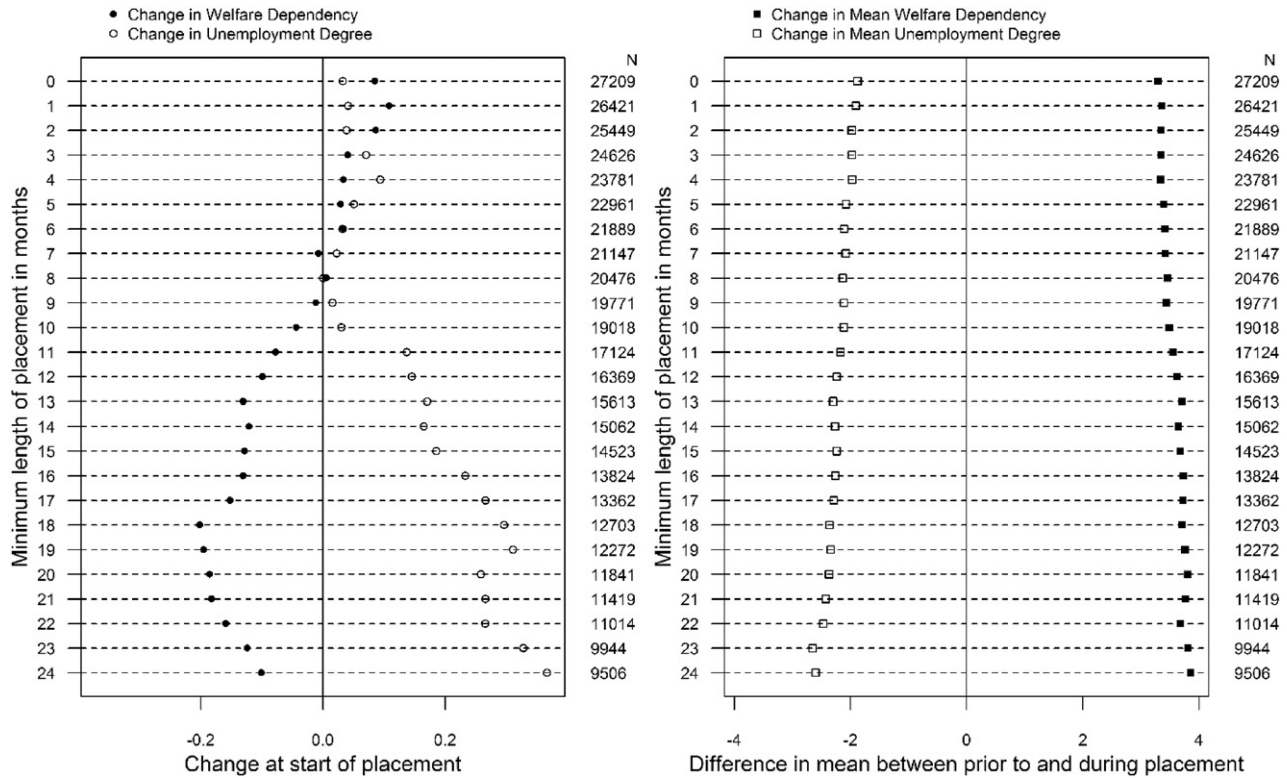


Fig. 2. Impact of placement on unemployment degree and welfare dependency across placement length measured as (a) the difference between month of placement and the month prior and (b) difference between mean prior to placement and mean during placement.

relationship status moderates the impact of out-of-home placement. Two brothers may not necessarily have the same relationship status at the same time (or ever), so if we condition on relationship status when comparing brothers from the treatment group (brothers who experience out-of-home placement) and the control group (brothers who do not experience placement) will be unbalanced. Instead, we interact the relationship dummies with all other variables in the model. This creates a saturated model that uses the entire sibling sample and allows siblings to share similarities across child age and relationship status. To control for sibling-specific resources, we also control for birth order.

3. Results

The average father is not likely to experience child removal. Comparing siblings allows us to examine the effect of child removal on welfare dependency for a group of fathers who are at high risk of having their

children placed in out-of-home care. Table 2 presents results from the sibling sample. Column 2 shows results from the OLS model with only main effects, and column 3 shows results from the OLS model where all explanatory variables are interacted with relationship status. We only show results for the main explanatory variables of interest. Fathers have 4.48 percentage points higher welfare dependency when their children are in out-of-home care. Single fathers have the highest increase of welfare dependency at 5.94 percentage points, followed by cohabiting fathers at 4.16 percentage points, and finally fathers living with the biological mother at 3.65 percentage points.

Column 4 shows results from the family fixed effect model with the main effect. The average effect of out-of-home placement on the group of fathers at risk is 2.99 percentage points. Column 5 reports the results from the model with relationship interactions. Single fathers (who almost never live with their children) increase welfare dependency by 4.12 percentage points. Out-of-home placement causes fathers who live with the

Table 2
Estimation results of out-of-home placement on monthly welfare dependency, years 1995–2005, sibling sample.

	OLS		Fixed effect	
	No interactions	Interactions	No interactions	Interactions
Out-of-home placement (OHP)	4.48*** (0.07)		2.99*** (0.06)	
OHP * single		5.95*** (0.13)		4.13*** (0.12)
OHP * cohabiting with other woman		4.16*** (0.10)*		2.42*** (0.10)
OHP * cohabiting with child's mother		3.65*** (0.13)		2.82*** (0.12)
N	2,069,918	2,069,918	2,069,918	2,069,918

Standard errors in parentheses.

No control variables shown.

Source: Own calculation on data from Statistics Denmark.

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

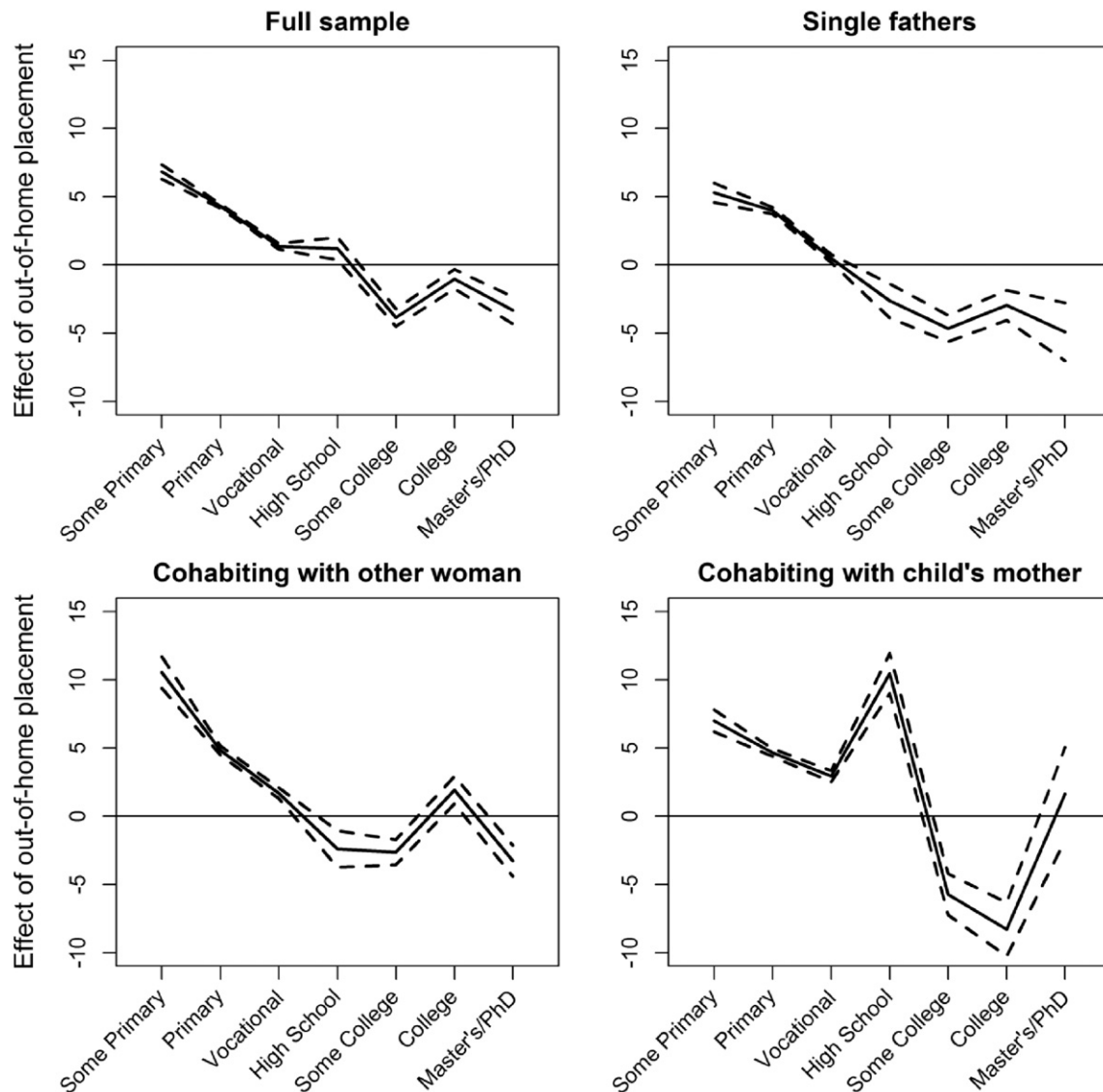
biological mother to increase by 2.81 percentage points, and cohabiting fathers increase by 2.42 percentage points. Out-of-home placement causes fathers at risk of experiencing out-of-home placement to increase welfare dependency.

Table 2 provides average policy relevant estimates for the impact of out-of-home placement on fathers' lives. Especially the finding that single men react more than men living with the child's mother or cohabiting with another woman is at first glance surprising. However, it could be due to compositional differences across the three relationship groups. Earlier work has shown that predictors for who enters out-of-home care differ across social class (e.g. Andersen & Fallesen, 2010; Berger & Waldfogel, 2004; Ejrnæs et al., 2011). Impact on fathers' welfare dependency might likewise differ across social class (here understood as education level), with education at the same time confounding relationship status. Thus, we examine whether educational attainment moderate the impact differences of an out-of-home placement across relationship status.

3.1. Education-specific effects

Social context and social position frame and moderate turning points. Men with more education may be better at handling their child being placed in out-of-home care than men with less education, because men with more education hold a better labor market position (and children might enter out-of-home care for different reasons across paternal education). Fig. 3 reports results across education level with education level along the x-axis and the parameter estimate of the effect of an out-of-home placement along the y-axis. There is a clear trend: the least educated fathers increase welfare dependency, while more highly educated fathers actually seem to decrease or break even.

Nevertheless, more than half the sample is in the two lowest education level groups (cf. Table 1). Fathers living with the biological mother have the steepest gradient across educational groups, where both single fathers and cohabiting fathers have a less steep gradient—they increase welfare dependency to much the same extent as fathers living with the



Notes: Dashed lines represent 95% confidence intervals.

Source: Own calculation on data from Statistics Denmark.

Fig. 3. The effect of out-of-home placement on paternal welfare dependency across educational background and relationship status for sibling sample.

biological mother among the low educated, but do not decrease to same extent among the highly educated. The results indicate that out-of-home placements have a disproportionately negative effect on individuals with low educational attainment, thereby possibly exacerbating inequalities in labor market attachment among the group of fathers who experience out-of-home placements. In addition, the results in Fig. 3 show that educational differences between fathers in different relationship types drive the differences across relationship types seen in Table 2. Fathers with low educational attainment are more likely to work in an hourly paid job, thereby having a more precarious position in the labor market. Hence, having their child taken into out-of-home care might affect these fathers faster and more directly than those with higher educational attainment and a more stable labor market position.

4. Discussion

Fatherhood has received increased attention from family sociologists and demographers over the last two decades (Marsiglio, Amato, Day, & Lamb, 2000; Williams, 2008). Nevertheless, aside from studies of how men react when they become fathers, research has primarily focused on how fathers affect their children, especially when they are not around (e.g. Danziger & Radin, 1990; Harper & McLanahan, 2004). In the same vein, studies of out-of-home placements have almost unilaterally (and for good reason) focused on how the intervention affects children (e.g. Berger et al., 2009; Doyle, 2007, 2008). In this article, we have instead studied how an out-of-home placement affects fathers' labor market behavior—that is, what happens to men's welfare dependency propensity when they no longer are caretakers of their children. Using population level longitudinal data drawn from official registers we have shown that out-of-home placements increase welfare dependency among fathers by up to 5 percentage points. To study how out-of-home placements affect the men likely to experience it, we compared fathers who experienced it to their brothers who did not experience it, and allowed the effect to differ across educational levels and the fathers' relationship status. Fathers with lower education experienced by far the largest increase in welfare dependency when their children entered out-of-home care, whereas fathers that are more educated experienced either no increase or even a decrease. Whereas we did find differences in impact of an out-of-home placement across relationship status, these impact differences proved to be completely confounded by differences in educational composition between the groups.

Two mutually inclusive explanations presented themselves. Children of higher educated men may have entered out-of-home care for different reasons than children with lower educated fathers. Previous research pointed to children's own behavioral problems as a driver of both lower parental labor market attachment and risk of out-of-home placement. If higher educated fathers' children predominantly entered care for such reasons, it could explain why we see higher educated fathers' react differently. In addition, higher educated fathers also hold labor market positions that likely would allow some protection from short term negative impact of an out-of-home placement on their productivity, whereas less educated fathers hold less shielded labor market positions. Thus, differences in causes of placement, as well as differences in level of direct job supervision could have jointly driven the educational gradient on the effect of out-of-home placement for men likely to experience it.

The findings contribute to the emerging literature on the impact of out-of-home placements on parental behavior and introduce new insights on the social mechanisms of fatherhood. Whereas a growing literature analyzes the effect of out-of-home care experiences on children's life outcome (e.g. Berger et al., 2009; Doyle, 2007, 2008; Fallesen, 2013; Frederiksen, 2012; Lindquist & Santavirta, 2014; Warburton, Warburton, Sweetman, & Hertzman, 2014), only a few studies examine the impact on parents (Ainsworth & Hansen, 2011; Buchbinder & Bareqet-Moshe, 2011; Schofield et al., 2011) and all of these focus solely on psychological impacts. Knowledge of whether fathers experience a

drop in labor market participation when their children enter out-of-home care can help outline the full social and economic consequences and costs of out-of-home placements. Moreover, the study offers new insights into how children affect labor market attachment among men who have entered fatherhood, but hold precarious positions on the labor market.

4.1. Limitations

Certain methodological issues persist in the study. We have considered issues concerning selection into out-of-home care by addressing selection bias caused by individual-specific constant traits as well as time-varying traits. Yet, some fathers might instigate out of home placements on their own initiative. If, for example, fathers cannot control their children or a child suffers from a mental or physical condition that demands time-consuming and specialized care, fathers might ask social services to take the child into care. If such situations are not constant over time, selection issues will remain in the presented results. Nevertheless, in the above-mentioned cases bias would probably only occur for fathers living with their child (i.e., almost never for single fathers), and the bias of the estimate would be towards zero because a placement would release a father from time demands in the home and therefore increase his potential labor supply. We do observe the tendency among certain groups in the sample (e.g. highly educated fathers), but it does not change the overall conclusion that most fathers decrease labor market attachment when their child enters out-of-home care.

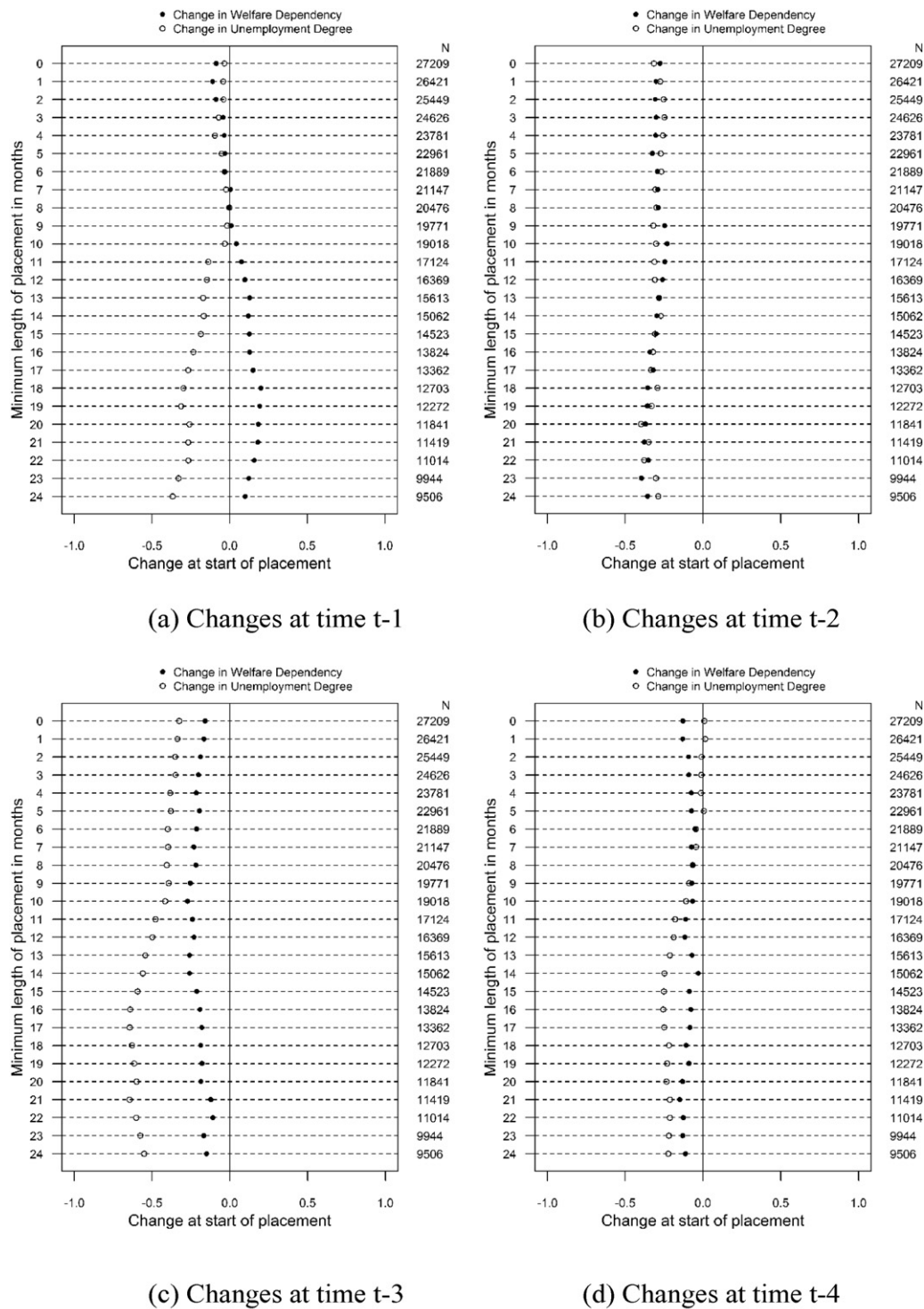
Another issue is that of reverse causality wherein a father might place his child into out-of-home care if his welfare dependency increases. Danish welfare payments are, from an international perspective, rather generous (\$1400 to over \$2000 a month for social assistance, depending on provider-position, age, and number of children), and it is mostly unheard of that parents enter children into out-of-home care due to poverty issues (however, see Wildeman and Fallesen, *forthcoming*). Reverse causality will only be a serious issue if fathers increase welfare benefit take-up because of an underlying condition prior to placement that leads to placement (this would be a version of Ashenfelter's dip (Ashenfelter, 1978)). Again, if we consider the results for single fathers for whom such an underlying condition almost never would lead to placement, this does not seem to be a serious issue. Nevertheless, this issue would definitely be worth addressing in future work that could extend insights from the present study.

4.2. Implications

The results of this study support conclusions drawn by recent qualitative research from three different countries on the experiences of identity-loss among fathers who have children in out-of-home care (Ainsworth & Hansen, 2011; Buchbinder & Bareqet-Moshe, 2011; Schofield et al., 2011). The negative experiences caused by having one's child placed in care leads to disadvantages in other parts of social life beyond the family. Gainful activities, such as educational attainment and work, keep individuals self-sufficient and connected to other members of mainstream society. When the impact to family and social life caused by an out-of-home placement spills over into labor market status, it is evident that cumulative disadvantages takes place.

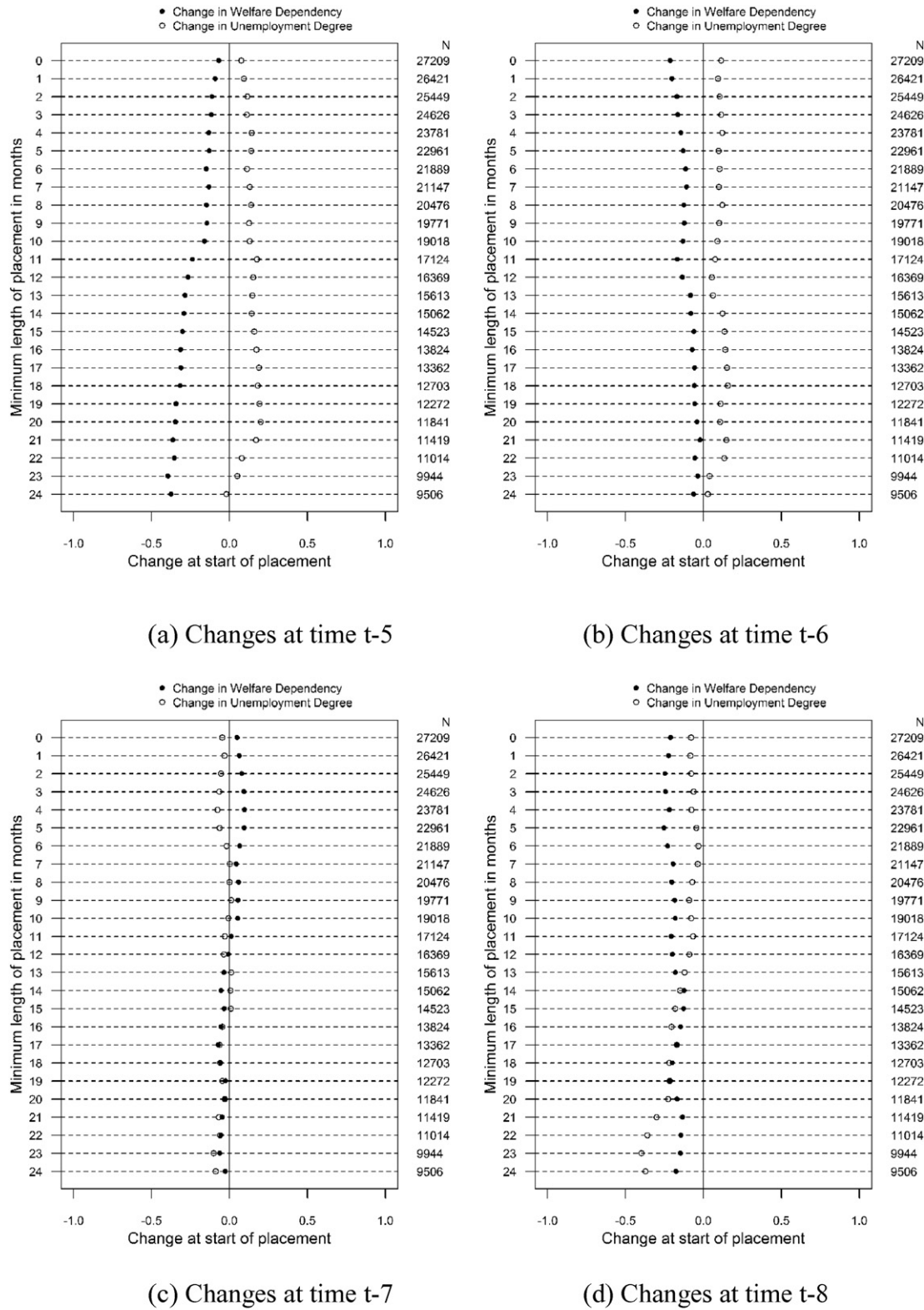
Children do best when they live in good and stable home environments. This is also by far the cheapest solution for society as a whole. Thus, there are obvious incentives for social services and policy makers to help fathers of out-of-home care children get back on their feet, so the children can be reunited with their biological parents. For this reason, it is unfortunate that out-of-home placements affect fathers in the opposite direction, sending them into a downward spiral, especially since recent research indicates that parental economic hardship prolongs out-of-home placements (Cancian et al., *forthcoming*).

Appendix A. Additional figures



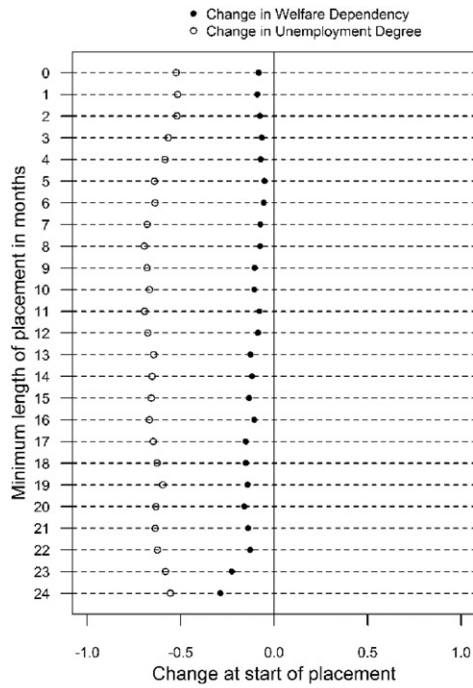
Source: Own calculation on data from Statistics Denmark.

Fig. A.1. Dot plots for pseudo-impact of placement on welfare dependency and unemployment degree at $t = -1$ month to $t = -4$ month (placement starts at $t = 0$).

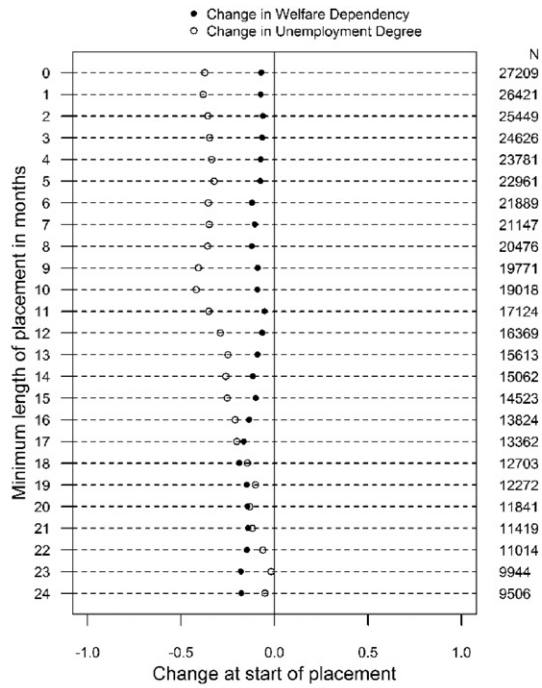


Source: Own calculation on data from Statistics Denmark.

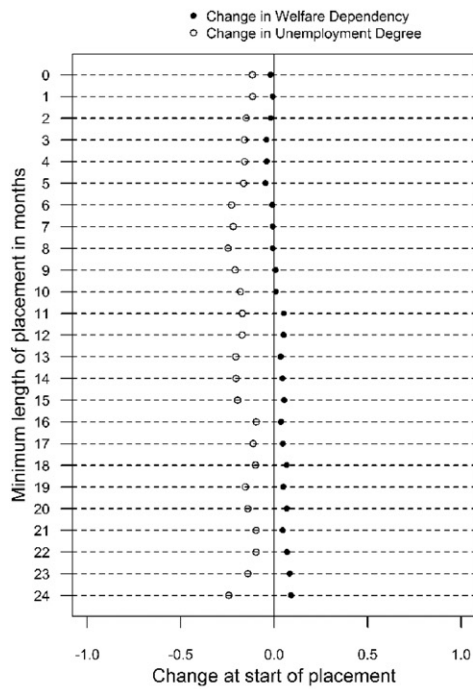
Fig. A.2. Dot plots for pseudo-impact of placement on welfare dependency and unemployment degree at $t = -5$ month to $t = -8$ month (placement starts at $t = 0$).



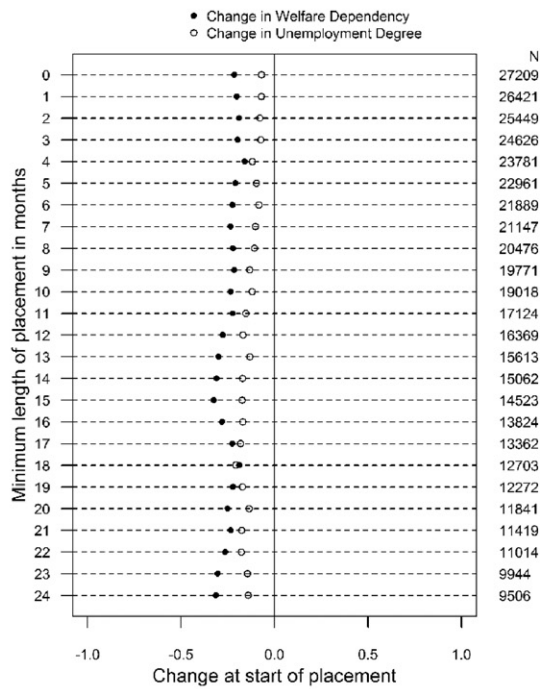
(a) Changes at time t-9



(b) Changes at time t-10



(c) Changes at time t-11



(d) Changes at time t-12

Source: Own calculation on data from Statistics Denmark.

Fig. A.3. Dot plots for pseudo-impact of placement on welfare dependency and unemployment degree at $t = -9$ month to $t = -12$ month (placement starts at $t = 0$).

References

- Aaronson, Daniel (1998). Using sibling data to estimate the impact of neighborhoods on children's educational outcomes. *The Journal of Human Resources*, 33, 915–946.
- Ainsworth, Frank, & Hansen, Patricia (2011). The experience of parents of children in care: The human rights issue. *Child & Youth Services*, 32, 9–18.
- Akerlof, George A. (1998). Men without children. *The Economic Journal*, 108, 287–309.
- Allgulin, Magnus, & Ellingsen, Tore (2002). Monitoring and pay. *Journal of Labor Economics*, 20(2), 201–216.
- Andersen, Signe Hald, & Fallesen, Peter (2010). A question of class: On the heterogeneous relationship between background characteristics and a child's placement risk. *Children and Youth Services Review*, 32, 783–789.
- Ashenfelter, Orley (1978). Estimating the effect of training programs on earnings. *The Review of Economics and Statistics*, 60, 47–57.
- Bellamy, Jennifer L., Thullen, Matthew, & Hans, Sydney (2015). Effect of low-income unmarried fathers' presence at birth on involvement. *Journal of Marriage and Family*.
- Berger, Lawrence M., & Waldfogel, Jane (2004). Out-of-home placement of children and economic factors: An empirical analysis. *Review of Economics of the Household*, 2, 387–411.
- Berger, Lawrence M., Bruch, Sarah K., Johnson, Elizabeth I., James, Sigrid, & Rubin, David (2009a). Estimating the "impact" of out-of-home placement on child well-being: Approaching the problem of selection bias. *Child Development*, 80, 1856–1876.
- Berger, Lawrence M., Paxson, Christine, & Waldfogel, Jane (2009b). Income and child development. *Children and Youth Services Review*, 31, 978–989.
- Bitler, M. P., Gelbach, J. B., & Hoynes, H. W. (2006). Welfare reform and children's living arrangements. *Journal of Human Resources*, 41, 1–27.
- Buchbinder, Eli, & Bareget-Moshe, Orit (2011). Hope and siege: The experiences of parents whose children were placed in residential care. *Residential Treatment for Children & Youth*, 28, 120–139.
- Budig, Michelle J., & England, Paula (2001). The wage penalty for motherhood. *American Sociological Review*, 66, 204–225.
- Cancian, Maria, Cook, Steven, Seki, Mai, & Wimer, Lynn (2016). Making parents pay: The unintended consequences of charging parents for foster care. *Children and Youth Services Review*, forthcoming.
- Cancian, Maria, Yang, Mi-Youn, & Slack, Kristen S. (2013). The effect of additional child support income on the risk of child maltreatment. *Social Service Review*, 87, 417–437.
- Correll, Shelley J., Benard, Stephen, & Paik, In (2007). Getting a job: Is there a motherhood penalty? *American Journal of Sociology*, 112, 1297–1339.
- Danziger, Sandra K., & Radin, Norma (1990). Absent does not equal uninvolved: Predictors of fathering in teen mother families. *Journal of Marriage and the Family*, 52, 636–642.
- Department of Health (2000). *Children looked after by local authorities year ending 31 March 1999, England*. London, UK: Department of Health.
- Doyle, Joseph J. (2007). Child protection and child outcomes: Measuring the effects of foster care. *American Economic Review*, 97, 1583–1610.
- Doyle, Joseph J. (2008). Child protection and adult crime: Using investigator assignment to estimate causal effects of foster care. *Journal of Political Economy*, 116, 746–770.
- Ebaugh, Helen R. F. (1988). *Becoming an ex: The process of role exit*. Chicago, IL: University of Chicago Press.
- Edin, Kathryn, & Nelson, Timothy Jon (2013). *Doing the best I can: Fatherhood in the inner city*. Berkeley, CA: University of California Press.
- Edin, Kathryn, Nelson, Timothy J., & Paranal, Rechelle (2004). Fatherhood and incarceration as potential turning points in the criminal careers of unskilled men. In M. Pattillo, D. Weiman, & B. Western (Eds.), *Imprisoning America: The social effects of mass incarceration* (pp. 46–75). New York: Russell Sage.
- Ejrnæs, M., Ejrnæs, M., & Frederiksen, S. (2011). Risk factors of entry in out-of-home care: An empirical study of Danish birth cohorts, 1981–2003. *Child Indicators Research*, 4(1), 21–44.
- Fallesen, Peter (2013). Time well spent: The duration of foster care and early adult labor market, educational, and health outcomes. *Journal of Adolescence*, 36, 1003–1011.
- Fallesen, Peter, & Wildeman, Christopher (2015). The effect of medical treatment of attention deficit hyperactivity disorder (ADHD) on foster care caseloads: Evidence from Danish registry data. *Journal of Health and Social Behavior*, 56, 398–414.
- Fallesen, Peter, Emanuel, Natalia, & Wildeman, Christopher (2014). Cumulative risks of foster care placement for Danish children. *PLoS One*, 9, e109207.
- Frederiksen, S. (2012). *Empirical essays on placements in outside home care*. (A PhD thesis submitted to Business and Social Sciences, Aarhus University).
- Gangl, Markus, & Ziee, Andrea (2009). Motherhood, labor force behavior, and women's careers: An empirical assessment of the wage penalty for motherhood in Britain, Germany, and the United States. *Demography*, 46, 341–369.
- Gilbert, Ruth, Kemp, Alison, Thoburn, June, Sidebotham, Peter, Radford, Lorraine, Glaser, Danya, & MacMillan, Harriet L. (2009). Recognising and responding to child maltreatment. *The Lancet*, 373, 167–180.
- Glauber, Rebecca (2008). Race and gender in families and at work: The fatherhood wage premium. *Gender & Society*, 22, 8–30.
- Goldthorpe, John (2000). *On sociology: Volume two – Illustrations and retrospect*. New York: Oxford University Press.
- Harper, Cynthia C., & McLanahan, Sara S. (2004). Father absence and youth incarceration. *Journal of Research on Adolescence*, 14, 369–397.
- Hersch, Joni, & Stratton, Leslie S. (2000). Household specialization and the male marriage wage premium. *Industrial & Labor Relations Review*, 54, 78–94.
- Hodges, Melissa J., & Budig, Michelle J. (2010). Who gets the daddy bonus? Organizational hegemonic masculinity and the impact of fatherhood on earnings. *Gender & Society*, 24, 717–745.
- Kaufman, Gayle, & Uhlenberg, Peter (2000). The influence of parenthood on the work effort of married men and women. *Social Forces*, 78, 931–947.
- Killewald, Alexandra (2013). A reconsideration of the fatherhood premium: Marriage, coresidence, biology, and fathers' wages. *American Sociological Review*, 78, 96–116.
- Knoester, Chris, & Eggebeen, David J. (2006). The effects of the transition to parenthood and subsequent children on men's well-being and social participation. *Journal of Family Issues*, 27, 1532–1560.
- Knoester, Chris, Petts, Richard J., & Eggebeen, David J. (2007). Commitments to fathering and the well-being and social participation of new, disadvantaged fathers. *Journal of Marriage and Family*, 69(4), 991–1004.
- Kruse, Douglas (1992). Supervision, working conditions, and the employer size-wage effect. *Industrial Relations: A Journal of Economy and Society*, 31, 229–249.
- Kunze, Astrid (2014). Are all of the good men fathers? The effect of having children on earnings. *IZA discussion paper no. 8113*.
- Kvist, Anette P., Nielsen, Helena S., & Simonsen, Marianne (2013). The importance of children's ADHD for parents' relationship stability and labor supply. *Social Science & Medicine*, 88, 30–38.
- Lindquist, M. J., & Santavirta, T. (2014). Does placing children in foster care increase their adult criminality? *Labour Economics*, 31, 72–83.
- Lundberg, Shelly, & Rose, Elaine (2002). The effects of sons and daughters on men's labor supply and wages. *Review of Economics and Statistics*, 84, 251–268.
- Lyngstad, Torkild H. (2013). Bereavement and divorce: Does the death of a child affect parents' marital stability? *Family Science*, 4, 79–86.
- Marsiglio, William, Amato, Paul, Day, Randal D., & Lamb, Michael E. (2000). Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and the Family*, 62, 1173–1191.
- Olsen, Annemette L., Larsen, Dorte, & Lange, Anita (2005). *Vielser og skilsmisser – Børn i skilsmisser*. Copenhagen, DK: Danmarks Statistik.
- Paxson, Christina, & Waldfogel, Jane (2003a). Work, welfare, and child maltreatment. *Journal of Labor Economics*, 20, 435–474.
- Paxson, Christina, & Waldfogel, Jane (2003b). Welfare reforms, family resources, and child maltreatment. *Journal of Policy Analysis and Management*, 22, 85–113.
- Percheski, Christine, & Wildeman, Chris (2008). Becoming a dad: Employment trajectories of married, cohabiting, and nonresident fathers. *Social Science Quarterly*, 89, 282–302.
- Sampson, Robert J., & Laub, John H. (1995). *Crime in the making: Pathways and turning points through life*. Cambridge, MA: Harvard University Press.
- Schermerhorn, Alice C., D'Onofrio, Brian M., Slutske, Wendy S., Emery, Robert E., Eric, Turkheimer, Paige Harden, K., ... Martin, Nicholas G. (2012). Offspring ADHD as a risk factor for parental marital problems: Controls for genetic and environmental confounds. *Twin Research and Human Genetics*, 15, 700–713.
- Schofield, Gillian, Moldestad, Bente, Højer, Ingrid, Ward, Emma, Skilbred, Dag, Young, Julie, & Havik, Toril (2011). Managing loss and a threatened identity: Experiences of parents of children growing up in foster care, the perspectives of their social workers and implications for practice. *British Journal of Social Work*, 41, 74–92.
- Sessions, John, & Theodoropoulos, Nikolaos (2008). Tenure, wage profiles and monitoring. *IZA discussion paper no. 3307*.
- Statistics Denmark (2016). *Statistikdokumentation for husstande, familier og børn 2016*. Copenhagen, DK: Statistics Denmark.
- Tach, Laura, Mincy, Ronald, & Edin, Kathryn (2010). Parenting as a "package deal": Relationships, fertility, and nonresident father involvement among unmarried parents. *Demography*, 47, 181–204.
- Ubbesen, M. B., Gilbert, R., & Thoburn, J. (2015). Cumulative incidence of entry into out-of-home care: Changes over time in Denmark and England. *Child Abuse & Neglect*, 42, 63–71.
- Waite, Linda J., Haggstrom, Gus W., & Kanouse, David E. (1985). Changes in the employment activities of new parents. *American Sociological Review*, 50, 263–272.
- Waldfogel, Jane (2004). Welfare reform and the child welfare system. *Children and Youth Services Review*, 26, 919–939.
- Warburton, William P., Warburton, Rebecca N., Sweetman, Arthur, & Hertzman, Clyde (2014). The impact of placing adolescent males into foster care on education, income assistance, and convictions. *Canadian Journal of Economics*, 47, 35–69.
- Warr, Mark (1998). Life-course transitions and desistance from crime. *Criminology*, 36, 183–216.
- Weinschenker, Matthew (2015). The effect of fatherhood on employment hours variation by birth timing, marriage, and coresidence. *Journal of Family Issues*, 36, 3–30.
- Wildeman, Christopher, & Emanuel, Natalia (2014). Cumulative risks of foster care placement for American children, 2000–2011. *PLoS One*, 9, e92785.
- Wildeman, Christopher, & Fallesen, Peter (2016). The effect of lowering welfare payment ceilings on children's risk of out-of-home placement. *Children and Youth Services Review*, forthcoming.
- Williams, Stephen (2008). What is fatherhood? Searching for the reflexive father. *Sociology*, 42, 487–502.